



Alaska Department of Transportation and Public Facilities

Clean Water Act Consent Decree

Part III Compliance Program

2011 Annual Report

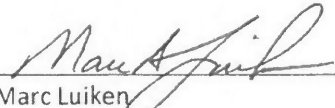
March 2012

Commissioner's Certification

I certify that in the 2011 reporting period, the Department had statewide compliance with Consent Decree Paragraphs 5.b, 5.c, 5.d, 6.c, 8.c, and 9.c.

CERTIFICATION STATEMENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.



Marc Luiken
Commissioner
Alaska Dept. of Transportation and Public Facilities

21 Feb 12
[Date]

Introduction

The following Alaska Department of Transportation and Public Facilities (DOT&PF) Clean Water Act Consent Decree 2011 Annual Report is prepared in accordance with Paragraph 9.c of the Decree.

The 2011 Annual Report is contained in the attached electronic files:

- Statewide 2011 Introduction and Summary
- Northern Region 2011 Annual Report
- Central Region 2011 Annual Report
- Southeast Region 2011 Annual Report
- Public Facilities 2011 Annual Report
- 2011 Annual Report Appendices

The 2011 Annual Report will first address items at Statewide level, including background on the Department's accomplishments, copies of any modified Inspection Report Form and modified Delayed Action Item Report (DAIR) Form per Paragraphs 9.c.(3) and (4), the current Alaska Certified Erosion and Sediment Control Lead (AK-CESCL) Course outline per Paragraph 9.c.(5), a list of Department-sponsored AK-CESCL trainings per Paragraph 9.c.(6), and an overall discussion and summary of the findings of this Report.

The Department has three Regions (Northern, Central and Southeast), and a Statewide Public Facilities Section, which separately maintain records for Active Projects under their jurisdiction. Therefore, a large portion of the 2011 Annual Report is arranged by these four functional units to address three of the seven required items. These are:

1. Annual Report of Non-Compliance with the Terms of the Consent Decree, per Paragraph 9.c.(1)
2. Annual Report of Active Projects, per Paragraph 9.c.(2)
3. Copies of all Delayed Action Item Report Forms for all Active Projects, per Paragraph 9.c.(7)

Each Regional Director and the Chief of the Statewide Public Facilities Section have the authority for projects under their jurisdiction and have certified their Region's report.

The worksheet used to report Active Projects differs slightly in format from the Consent Decree Appendix F. The revised worksheet contains all the information listed on the worksheet in Appendix F, and was used in the 2010 Annual Report after obtaining approval from Kristine Karlson, NPDES Compliance Officer, in January 2011. It should be noted that this year, another change to the Active Projects worksheet was necessary due to the issuance of a new Construction General Permit (CGP). Projects that began construction under an EPA permit or the 2010 DEC permit and also continued coverage under the 2011 permit have two (the initial and 2011) permit tracking numbers provided on the Active Projects worksheet. However, only the initial permit tracking number is provided on the Non-Compliance worksheet.

Background

In this reporting year, the CGP was reissued. As part of keeping current with changing CGP requirements, the Standard Specification that addresses erosion, sediment and pollution control and some of the storm water documentation forms were revised. Prior to the 2011 construction season, the Regional Stormwater Specialists and Headquarters staff had several meetings to facilitate these revisions as well as focus on consistent statewide practices and improving compliance. Approximately 450 staff hours were committed to these meetings. The Department has expended resources to hire staff to increase the Department's capacity to review project documents and work with project staff to improve compliance. The Department also hired a consultant to work with key staff members from the Regions and Headquarters to review and evaluate the positive and negative aspects of the Department's compliance program through a hands-on field audit of two active project sites.

In addition, the Department hired two consultants to offer three, two-day SWPPP writing courses. Both instructors are nationally known for their storm water training experience. These courses were intended for those in the industry who prepare SWPPPs as well as Department staff that review these documents in order to improve compliance with SWPPP requirements in both the CGP and the Consent Decree. While the focus was on preparing a well-developed SWPPP, time was devoted to the Consent Decree requirements in each class. These classes were attended by 102 individuals. The Department also developed a SWPPP Template that outlines how to modify the DEC SWPPP Template to meet the Department's requirements, including those in the Decree.

The Department also provided half-day training in three cities that focused on erosion and sediment control updates for design engineers. The training covered the Decree, changes in the 2011 CGP and changes in statewide procedures for storm water management. The purpose of the training was to provide Pre-construction Engineers with the information that will help them improve their preparation of contract plans and specifications. The training was attended by 132 employees.

The University continues to administer the AK-CESCL training program through an Educational Services Agreement, with continued oversight by an interagency steering committee. In this reporting period, the Department had approximately 114 employees certified as AK-CESCL (includes new and re-certifications). The CGP requires AK-CESCL certification as of May, 2011 for certain-sized projects.

The Department continues supporting its employees who want to obtain professional certification in the field of erosion control. CISEC is an internationally recognized inspector certification program that was founded by industry professionals in 2006 in response to a growing need for a certifying program specifically for construction site inspectors. While anyone can attend the 1.5 day review class, there are field and classroom prerequisites in order to take the 3.5-hour exam. CISEC certification is obtained upon review of the applicant's experience and a passing grade on the exam. Prior to 2011, only six Department employees held a CISEC certification. However, the Department coordinated with CISEC to bring their program to Alaska, providing an opportunity for Department employees and contractors to obtain CISEC certification. Three courses in two cities were offered. As a result of this opportunity, 27 additional Department employees became CISEC certified in 2011, and one Department employee has been approved to teach CISEC courses and will be teaching CISEC at the next International Erosion Control Association (IECA) conference in Las Vegas.

The Department continues to support training expenditures to keep its storm water staff current on changes in the industry. The Department sent nine employees to the 2010 annual five-day Environmental Connection conference sponsored by the professional organization International Erosion Control Association (IECA), held in Orlando. The Department also sent two employees to StormCon 2011, the North American Surface Water Quality Conference and Exposition, held in Anaheim, California.

Inspection Report Form and Delayed Action Item Report Form

During this reporting period, existing Department storm water recordkeeping forms were updated to comply with 2011 CGP requirements, including the Inspection Report Form (Form 25D-100). The revisions on the Inspection Report Form did not meet the definition of a modification as defined in Decree Paragraph 7.d.

During this update, the Delayed Action Item Report Form (Form 25D-113) was revised for ease of use. The revisions on the Delayed Action Item Report form did not meet the definition of a modification as defined in Decree Paragraph 8.c.

Both forms were previously sent to the EPA NPDES Compliance Officer via email on October 20, 2011, as a courtesy, and are provided in this report, Appendix A and B for information only.

Alaska Certified Erosion and Sediment Control Lead (AK-CESCL) Training

Below is the list of the dates and locations of all DOT&PF-sponsored AK-CESCL Trainings in 2011, per Paragraph 9.c.(6). In addition to the DOT&PF-sponsored courses, approximately 33 courses were offered by other entities.

Dates	Location (City)
03/08 – 03/09/2011	Fairbanks, AK
03/30 – 03/31/2011	Juneau, AK
05/17 – 05/18/2011	Anchorage, AK
05/19 – 05/20/2011	Fairbanks, AK
05/23 – 05/24/2011	Nome, AK
12/1–12/2/2011	Juneau, AK

The outline of the current AK-CESCL course follows on page 5 per Paragraph 9.c.(5). The outline of the course was revised when the CGP for Alaska was reissued on July 1, 2011 to maintain consistency with the new permit requirements. During this revision, course modules and topics within modules were re-arranged to improve the progression of course topics. Further reorganization was done according to the Department of Environmental Conservation's request to present control measures in the order that they are presented in Part 4 of the CGP.

The topics of one particular module (Module IV. Alaska Climate Issues and BMPs) are interwoven into other modules where they fit best. While this module is no longer listed in the 2011 course outline, none of the slides or topics have been eliminated. In fact, there are more slides on the topic of Alaska Climate Issues than in the previous version. The Alaska conditions topics are presented in Module III (Factors Influencing Erosion Potential), Module VI (SWPPP Introduction) and Module VII (Control Measures).

Over all, between the two course versions, the total number of slides is within 3 percent of each other. Since no module was reduced by 50 percent or more and no module was eliminated, the course revision did not meet the definition of a major modification as defined in Decree Paragraph 5.c.

Furthermore, new tests were written, to account for changing regulations. But the testing requirement and passing score have not been changed.

AK-CESCL Course Outline

Revised October 2011

Course Elements:

Module I. Erosion and Sedimentation Impacts

- A. Examples/Case studies

Module II. Erosion and Sedimentation Processes

- A. Definitions
- B. Types of erosion
- C. Sedimentation
 - 1. Basic settling concepts
 - 2. Problems with clays/turbidity

Module III. Factors Influencing Erosion Potential

- A. Soil
- B. Climate
- E. Vegetation
- F. Topography

Module IV. Regulatory Requirements

- A. Federal, state, MS4, and local requirements and permits
- B. Other regulatory requirements
- C. DEC Wastewater Disposal General Permit – Excavation Dewatering
- D. Water Quality Standards
- E. The most current version of the Department of Environmental Conservation APDES General Permit for Storm Water Discharges from Construction Activities

Module V. Inspections/Monitoring/Recordkeeping

- A. Site Inspections
 - 1. CGP Inspection Frequency
 - 2. Scope of Inspection
 - 3. Inspection Reports
- B. Monitoring
- C. Recordkeeping
 - 1. Corrective Actions and Corrective Action Log
 - 2. Grading and Stabilization Log
 - 3. SWPPP Modifications/Amendment Log
 - 4. Site Map/Plan Sheets

Module VI. Storm Water Pollution Prevention Plan (SWPPP) Introduction

- A. Purpose/Objectives of a SWPPP
- B. Required Elements
- C. BMPs

Module VII. ACGP Required Control Measures

- A. Erosion Control
 - 1. Delineation of Site
 - 2. Minimize Amount of Exposed Soil during Construction Activity
 - 3. Maintain Natural Buffer Areas
 - 4. Control Stormwater Discharges and Flow Rates
 - 5. Protect Steep Slopes
- B. Sediment Control
 - 1. Storm Drain Inlet Protection Measures
 - 2. Water Body Protection Measures
 - 3. Down-Slope Protection Measures
 - 4. Stabilized Vehicle Construction Access & Exit Points
 - 5. Dust Generation and Track-out from Vehicles
 - 6. Soil Stockpiles
 - 7. Authorized Non-storm Water Discharges
 - 8. Sediment Basins
- C. Dewatering
- D. Soil Stabilization
- E. Treatment Chemicals
- F. Prohibited Discharge
- G. Good Housekeeping
- H. Spill Notification
- I. Permanent Storm Water Management Control
- J. Winter Considerations
- K. Maintenance of Control Measures

Description of Training:

The AK-CESCL course is a two-day course.

At the end of the course, a written exam is given. To be certified, a trainee must attend the course and pass the exam with at least a 70 percent score.

Certification is valid for three years.

Discussion

There are a few instances which the Department would like to recognize, though they do not constitute a Decree noncompliance.

There was one instance where the Department accidentally filed two NOIs under the 2011 CGP for the same continuing project when transferring coverage to the new permit. As soon as the Department became aware that two NOIs existed for the project, a NOT was filed for one of the NOIs. The tracking number for the active NOI under the 2011 CGP is provided in the worksheet used to report Active Projects. However, since both NOIs were forwarded to the EPA NPDES Compliance Officer per Decree Paragraph 9.b, both tracking numbers are provided below with the corresponding project name, previous NOI tracking number under the 2010 CGP, and NOT signature date for the terminated NOI under the 2011 CGP. The project is still active under the active 2011 tracking number.

Project Name	Original NOI Tracking #	Active 2011 NOI Tracking #	Terminated 2011 NOI Tracking #	NOT Signature Date	Region
Glenn Hwy Lighting S Birchwood to Eklutna	AKR10DJ88	AKR10DT19	AKR10DS53	10/3/2011	Central

There were also two instances in which the Department filed NOIs that were inadvertently cancelled by the Department of Environmental Conservation (DEC). As soon as the Department became aware that these NOIs had been cancelled, the Department re-filed for permit coverage. The NOIs that were cancelled out of the system are not associated with a NOT, but are not considered active. Therefore, the tracking numbers for the cancelled NOIs are not reported in the worksheet used to report Active Projects. However, since these NOIs had been forwarded to the EPA NPDES Compliance Officer per Decree Paragraph 9.b prior to their being cancelled by DEC, the tracking number for cancelled NOIs are provided below along with the corresponding project name and active NOI tracking number.

Project Name	Cancelled NOI Tracking #	Active NOI Tracking #	Region
Dalton Highway MP 274 – 289 Rehabilitation	AKR10DO52	AKR10DQ18	Northern
Kotzebue Airport and Safety Area Improvements	AKR10DQ10	AKR10DV06	Northern

There were nine instances in which a Delayed Action Item Report (DAIR) Form was inappropriately completed. In the Central Region, at the Kalifornski Beach Road Pedestrian Pathway, Glenn Highway Lighting and Trunk Road projects, DAIRs were completed for Corrective Actions not completed by the complete-by dates though it was practicable to do so. Therefore, these instances have been reported in the Non-Compliance Worksheet as not compliant with Decree Paragraph 8.a. At the Ward to Whipple Creek project in Southeast Region, a DAIR was completed though the problem was that the inspection report did not provide a complete-by date. This was reported as not compliant with 7c10 in the Non-compliance Worksheet. Coffman Cove Maintenance Station in Southeast Region, a DAIR was completed inappropriately to explain why an inspection was conducted a day late. This instance is reported as noncompliant with Paragraph 7.b. Consequently, these DAIR Forms are not included in the Report per Paragraph 9.c.(7). The following table provides information for each of these instances to assist with

locating these reportable instances of non-compliance on the Non-compliance Worksheets provided in the Regional reports.

Project Name	Region	Date Non-Compliance Began	Date of Return to Compliance	Applicable Decree Paragraph
Kalifornski Beach Road Pedestrian Pathway	Central	6/18/2011	6/20/2011	8a
Kalifornski Beach Road Pedestrian Pathway	Central	6/18/2011	6/21/2011	8a
Kalifornski Beach Road Pedestrian Pathway	Central	6/18/2011	6/21/2011	8a
Kalifornski Beach Road Pedestrian Pathway	Central	6/18/2011	6/21/2011	8a
Glenn Highway Lighting, S. Birchwood to Eklutna	Central	6/22/2011	6/22/2011	8a
Glenn Highway Lighting, S. Birchwood to Eklutna	Central	6/22/2011	6/22/2011	8a
Trunk Road	Central	7/02/2011	7/05/2011	8a
Ward to Whipple Creek	Southeast	4/11/2011	5/5/2011	7c10
Coffman Cove Maintenance Station	Southeast	7/14/2011	7/14/2011	7b

Table 1. DOT&PF Projects, by Region, for which a Delayed Action Item Report (DAIR) was inappropriately completed and resulted in non-compliance with the Consent Decree. The dates and applicable Consent Decree Paragraph reported in the Regional Non-Compliance Worksheets are provided for reference.

There were also a number of DAIR Forms included in the Regional reports that were completed in an untimely manner but were still prepared in order to comply with the requirements in Paragraphs 8.a. and 8.b. This is understandable given that this form is relatively new to Department staff. Though the Department does not believe the untimeliness of the form constitutes a non-compliance, the Department recognized the form was confusing and revised it slightly to facilitate its use. As seen in Appendix B, the form is divided into Part 1 and Part 2, as the two parts are intended to be completed at different times.

Summary

Tables 2 and 3 provide a summary of the two worksheets included in this report. As shown in Table 3, the Department had statewide compliance with Paragraphs 5.b, 5.c, 5.d, 6.c, 8.c, and 9.c during the 2011 reporting period. Furthermore, there were eleven categories of non-compliance with which the Department was compliant for both the 2010 and 2011 reporting periods (see Table 3). Twenty-two of the Department's active projects were found to be compliant with Decree requirements during the reporting period. There have been no modifications to either the Inspection Report or Delayed Action Item Report forms in this reporting period.

In addition, the AK-CESCL Training Program is successful, given the low number of non-compliances with Paragraph 5.a. Furthermore, though inspectors overlooked some of the required information for BMP corrective actions such as a location or a complete-by date, most of these corrective actions were completed within three days of the inspection in which they were identified.

	Active Projects	Instances of Non-Compliance
<i>Total Statewide</i>	98	394
Northern	35	95
Central	42	169
Southeast	13	90
Public Facilities	08	40

Table 2. The Department's total number of Active Projects and instances of non-compliance with the Consent Decree, both statewide and by Region.

Applicable Paragraph	Number of Incidences
5 – Training	
5a – Training for DOT&PF	2
5b – Training for Contractors	0*
5c – Modification of AK-CESCL Training Program	0*
5d – Equivalent AK-CESCL Certification	0*
6 – Construction and SWPPP Requirements	
6a – SWPPP	
6a1 – SWPPP Preparer's Name	0*
6a2 – DOT&PF Project Engineer SWPPP Certification	3
6a3 – SWPPP Amendments	14
6a4 – Availability of SWPPP documents	0*
6b – BMP Manual Citations	84
6c – Seasonal Stabilization	0*
7 – Inspection Program	
7a – Pre-construction Inspections	1
7b – Inspections	30
7c – Inspection Reports	4
7c1 – Inspection Date	0*
7c2 – Inspector Qualifications	99
7c3 – Scope of Inspection	2
7c4 – Weather/ Discharges since Last Inspection	35
7c5 – Weather/ Discharges during Inspection	1
7c6 – Location of Discharges	0*
7c7 – Location of BMP(s) Requiring Maintenance	19
7c8 – Location of BMP(s) that Failed	0*
7c9 – Location of Additional BMP(s) Needed	4
7c10 – BMP Action Items and Complete-by Date	41
7c11 – Certification by Project Engineer and Superintendent	22
8 – Project Maintenance	
8a – Deadline for Completing Action Items	27
8a – Deadline Selection Requirements	1
8b – Delayed Action Item Report	1
8c – Modifications to Delayed Action Item Report	0*
9 – Reporting	
9a – Endangerment Reports	1
9b – Notices of Intent	3
9c – Annual Report	0*
TOTAL	394

Table 3. The Department's total statewide instances of non-compliance with the Consent Decree by applicable Paragraph. Those items that did not result in any non-compliance in both the 2010 and 2011 reporting periods are noted with an asterisk (*).

The Inspection requirements outlined in Paragraph 7.b state that an active project must conduct inspections as allowed by the CGP and identified in the SWPPP. However, the Department would like to discuss the late inspections for a project in the Central Region, Akutan Airport (AKR10DK11). Akutan is an island in the Bering Sea and often experiences severe weather and high winds. The project staff are unable to stay in Akutan, and commute to the site by small plane to Akun, located across the channel and from there take a small boat. In cases of extreme weather where flights are cancelled or the sea is too rough for commuting by boat, for safety, staff do not go to the project site, and as a consequence, some inspections were late. There were four instances where inspections were conducted late on this project due to project staff being unable to access the site.

Of the Department's total of 394 instances of non-compliance, 229 (or 58 percent) of these instances are found to be inconsequential, as they would not impact the Department's ability to protect water quality. This includes instances reported under Paragraphs 6.a, 6.b, and 7.c, as described below.

The Storm Water Pollution Prevention Plan (SWPPP) components as outlined in Paragraphs 6.a and 6.b resulted in 98 reported noncompliance instances. Lack of a BMP Manual citation accounts for 84 of these instances. Good Housekeeping and other procedural BMPs outlined in the SWPPP most often lacked a reference to a BMP manual, or did not explicitly state that a BMP manual was not used. The Good Housekeeping BMPs are typically described well in the SWPPP and include many practices that are common on Department projects. This error accounts for 50 of the total instances with Paragraph 6.b. The fourteen noncompliance instances reported under Paragraph 6.a.(3) (AK-CESCL approval of SWPPP Amendments) were inconsequential since thirteen of these instances were for amendments updating paperwork, such as updating site maps, naming the individuals serving as the Contractor's SWPPP Manager or Superintendent, or incorporating permits, and one instance resulted from an AK-CESCL certified individual failing to update their certification information in the SWPPP prior to approving several amendments, even though she was currently certified. These instances did not involve amendments that added, deleted or altered BMPs.

Of the Department's instances of non-compliance with inspection report requirements in Paragraph 7.c, more than half, or 131, is the result of simple human error, and are not instances that were detrimental to water quality. Such common human errors include providing an incorrect AK-CESCL number or expiration date, missing one or more of the required pieces of information on weather and/or storm events, and overlooking boxes that need to be checked on the inspection report.

The most common clerical error, resulting in 87 instances reported under Paragraph 7.c.(2), was where the AK-CESCL certification number or expiration date were reported incorrectly. This year, an AK-CESCL Program administrative convention change from numeric to alpha-numeric AK-CESCL certification numbers resulted in 24 of these instances, as storm water inspectors did not realize that the two or three letter code for the issuing agency was a part of their certification number and failed to provide it on inspection reports. Another common mistake was either adding or leaving off zeros in the certification number. This accounted for 12 instances. Storm Water Inspectors though currently certified provided an incorrect expiration date on the inspection report, accounting for 34 instances. The remaining 17 instances resulted from other errors in transcribing the inspector's qualification information.

Another common recordkeeping error resulting in non-compliance is missing or inaccurately reporting information regarding weather or storm events since the last inspection on the inspection reports. This

type of non-compliance occurred 35 times. Fifteen of these instances resulted from storm events being documented on the rain log that were not reported on inspection reports. Seven instances resulted from missing one of the required pieces of information regarding the storm event. Failing to complete the weather section of the inspection report form occurred ten times, three of which were instances where the storm water inspectors failed to provide information regarding the weather since the commencement of construction activities on the first inspection report. This year, the 2011 APDES Construction General Permit defined storm event, and three of the total instances resulted from not providing storm event information in accordance with this new definition. In these cases, the required information for the storm event could be inferred from the rain log.

Nine instances of noncompliance resulted from inspectors forgetting to mark a "yes" or "no" box to indicate whether a BMP is installed or whether a BMP requires action. This type of omission is understandable given the large number of BMPs that may be installed across a project. It is most likely that the BMP was inspected and did not require action because the inspectors develop a routine for their inspection route and would have written an entry in the appropriate column of the report to describe the action. In addition, for these cases, no action was listed for these items in the Corrective Action Log. However, since the inspection report lacks documentation for it, the Department has listed these cases as noncompliance with Paragraph 7.c.(10).